abcam

Product datasheet

Anti-Histone H2B (acetyl K20) antibody [RM235] ab271344

リコンピナント

画像数 4

製品の概要

製品名 Anti-Histone H2B (acetyl K20) antibody [RM235]

製品の詳細 Rabbit monoclonal [RM235] to Histone H2B (acetyl K20)

由来種 Rabbit

特異性 No cross reactivity with non-modified Lysine 20 or other acetylated Lysines in histone H2B.

アプリケーション 適用あり: WB, ELISA, ICC/IF

種交差性 交差種: Human

免疫原 Synthetic peptide corresponding to Histone H2B (acetyl K20).

ポジティブ・コントロール ICC/IF: HeLa cells treated with sodium butyrate. WB: HeLa cells treated with sodium butyrate.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

パッファー Preservative: 0.09% Sodium azide

Constituents: 50% Glycerol (glycerin, glycerine), 1% BSA

精製度 Protein A purified

ポリ/モノ モノクローナル

クローン名 RM235

アイソタイプ IgG

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab271344の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項

1

アプリケーション	Abreviews	特記事項
WB		Use a concentration of 0.5 - 2 µg/ml. Predicted molecular weight: 14 kDa.
ELISA		Use a concentration of 0.2 - 1 µg/ml.
ICC/IF		Use a concentration of 1 - 2 μg/ml.

ターゲット情報

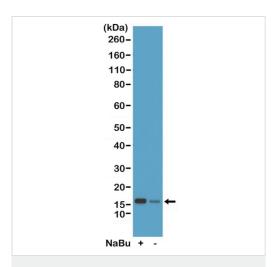
関連性

Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling. Subunit structure The nucleosome is a histone octamer containing two molecules each of H2A, H2B, H3 and H4 assembled in one H3-H4 heterotetramer and two H2A-H2B heterodimers. The octamer wraps approximately 147 bp of DNA. Post-translational modification Monoubiquitination at Lys-35 (H2BK34Ub) by the MSL1/MSL2 dimer is required for histone H3 'Lys-4' (H3K4me) and 'Lys-79' (H3K79me) methylation and transcription activation at specific gene loci, such as HOXA9 and MEIS1 loci. Similarly, monoubiquitination at Lys-121 (H2BK120Ub) by the RNF20/40 complex gives a specific tag for epigenetic transcriptional activation and is also prerequisite for histone H3 'Lys-4' and 'Lys-79' methylation. It also functions cooperatively with the FACT dimer to stimulate elongation by RNA polymerase II. H2BK120Ub also acts as a regulator of mRNA splicing: deubiquitination by USP49 is required for efficient cotranscriptional splicing of a large set of exons. Phosphorylation at Ser-37 (H2BS36ph) by AMPK in response to stress promotes transcription. Phosphorylated on Ser-15 (H2BS14ph) by STK4/MST1 during apoptosis; which facilitates apoptotic chromatin condensation. Also phosphorylated on Ser-15 in response to DNA double strand breaks (DSBs), and in correlation with somatic hypermutation and immunoglobulin class-switch recombination. GlcNAcylation at Ser-113 promotes monoubiquitination of Lys-121. It fluctuates in response to extracellular glucose, and associates with transcribed genes. Crotonylation (Kcr) is specifically present in male germ cells and marks testis-specific genes in post-meiotic cells, including X-linked genes that escape sex chromosome inactivation in haploid cells. Crotonylation marks active promoters and enhancers and confers resistance to transcriptional repressors. It is also associated with post-meiotically activated genes on autosomes.

細胞内局在

Nuclear

画像



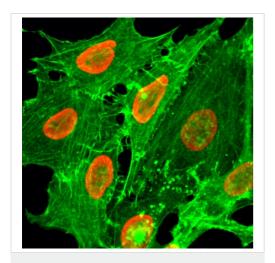
Western blot - Anti-Histone H2B (acetyl K20) antibody [RM235] (ab271344)

All lanes : Anti-Histone H2B (acetyl K20) antibody [RM235] (ab271344) at 0.5 $\mu g/ml$

Lane 1 : Acid extracts of HeLa (Human epithelial cell line from cervix adenocarcinoma) treated with sodium butyrate

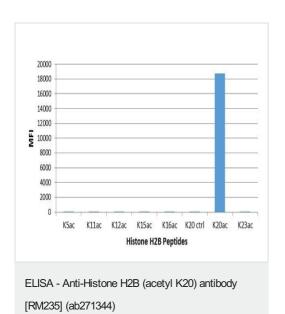
Lane 2: Acid extracts of untreated HeLa cells

Predicted band size: 14 kDa

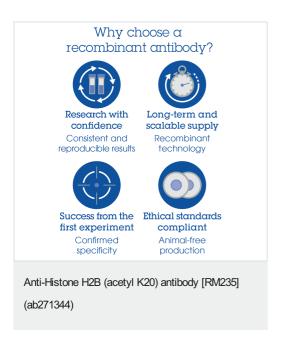


Immunocytochemistry/ Immunofluorescence - Anti-Histone H2B (acetyl K20) antibody [RM235] (ab271344)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human epithelial cell line from cervix adenocarcinoma) cells treated with sodium butyrate stained for Histone H2B (acetyl K20) using ab271344 at 2 μ g/ml (red). Actin filaments have been labeled with fluorescein phalloidin (green).



ab271344 specifically reacts to Histone H2B acetylated at Lysine 20 (K20ac). No cross reactivity with non-modified Lysine 20 or other acetylated Lysines in histone H2B.



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery

- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.co.jp/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors